



August 31, 2017

**VIA ECFS**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

**Subject:** *Notice of ex parte presentation – WC Docket No. 10-90  
CAF Phase II Competitive Bidding*

Dear Ms. Dortch:

On August 30, 2017, Hughes Network Systems (“Hughes”) met with Jerry Ellig, Chief Economist, and Paul LaFontaine of the Office of Strategic Planning and Policy Analysis to discuss the above-referenced proceeding. Hughes was represented by me and outside counsel L. Charles Keller of Wilkinson Barker Knauer LLP. Hughes’s presentation in the meeting followed the attached talking points, which were distributed to the meeting attendees. Hughes also provided the attendees with copies of a paper that Hughes recently highlighted in this docket<sup>1</sup> and Hughes’s pending petition for reconsideration.<sup>2</sup>

Please direct any questions regarding this filing to the undersigned

Sincerely,

/s/  
Jennifer A. Manner  
Senior Vice President, Regulatory Affairs

Attachment

Cc: Jerry Ellig  
Paul LaFontaine

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<sup>1</sup> Yu-Hsin Liu, Jeffrey Prince, and Scott Wallsten, “Distinguishing Bandwidth and Latency in Households’ Willingness-to-Pay for Broadband Internet Speed,” Technology Policy Institute (Aug. 2017), available at <https://techpolicyinstitute.org/wp-content/uploads/2017/08/Distinguishing-Bandwidth-and-Latency-in-Households-Willingness-to-Pay-for.pdf>.

<sup>2</sup> Petition for Reconsideration of Hughes Network Systems, LLC, WC Docket Nos. 10-90 and 14-58 (filed April 20, 2017) (“Reconsideration Petition”).

**Hughes Network Systems**  
**Satellite Providers, the Broadband Marketplace, and CAF Phase II**  
**August 2017**

**The quality and scope of satellite broadband services continues to increase at a rapid pace.**

- Hughes announced in early June that its EchoStar XIX satellite (also called HughesNet Gen5) that went into commercial operation in March 2017 was already serving over 200,000 households in just two months of operation.
- Satellite service continues to improve. Gen5 service features include:
  - Full geographic coverage in the continental United States, Puerto Rico and parts of Alaska
  - Faster speeds including and exceeding 25/3 Mbps
  - Greater capacity
    - Improved compression and caching technologies to minimize data usage
  - Features to minimize the impacts of latency
    - Caching and techniques to speed up website loading
- The record shows that satellite broadband customers are just as satisfied as broadband customers on other technology platforms.

**The CAF bid-weighting matrix should reflect the Commission's strong new commitment to evidence-based, data-driven economic analysis.**

- The current weights do not reflect actual economic data on consumer preferences.
  - No economic or other analysis supports the specific weights currently applied to speed tiers.
  - The bid weights adopted in the order are significantly undermined by a recent scholarly analysis,<sup>1</sup> which showed that:
    - Households' willingness to pay for additional speed falls quickly above 75 Mbps.
    - Households are only willing to pay a premium of \$8.66 per month to reduce latency from levels common in satellite broadband to levels common in wireline broadband.
    - Demand for increased data capacity is also concave as caps increase from 300 GB to 1000 GB (although consumers place a premium on unlimited service).

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<sup>1</sup> Yu-Hsin Liu, Jeffrey Prince, and Scott Wallsten, *Distinguishing Bandwidth and Latency in Households' Willingness-to-Pay for Broadband Internet Speed*, Technology Policy Institute (Aug. 2017), available at <https://techpolicyinstitute.org/wp-content/uploads/2017/08/Distinguishing-Bandwidth-and-Latency-in-Households-Willingness-to-Pay-for.pdf>.

- Satellite broadband customers are just as satisfied as terrestrial broadband customers.
- The majority of Internet traffic is not latency-sensitive (web browsing, video streaming).
- The latency penalty imposed by the scoring mechanism is arbitrary. The Order made no attempt to explain why a 25 point penalty is more accurate than a 5-point, 10-point, or 50-point penalty.
- The current bid matrix omits an important element of consumer welfare in extending broadband service per the CAF program's goals – time of service.
  - As discussed in Dr. Scott Wallsten's paper, the time when a given activity will occur is a key component of economic analysis.
    - OMB Circular A-4, which sets out how government agencies are to conduct regulatory analyses, directs agencies to consider benefits in the near term more highly than benefits later in time.
  - Different broadband technologies have markedly different speeds to market.
  - Consumers who lack broadband service today will benefit more by receiving service next year than they will by getting it five years from now. The FCC should explain why it takes into account the poorly-studied consumer preferences regarding speed and latency and ignores the well-studied effects of time preferences.
  - The bidding matrix should take into account consumer time preference in the same way OIRA established for regulatory analyses decades ago.